THE MAYA AND THEIR CENTRAL AMERICAN NEIGHBORS

SETTLEMENT PATTERNS, ARCHITECTURE, HIEROGLYPHIC TEXTS, AND CERAMICS

EDITED BY GEOFFREY E. BRASWELL

ROUTLEDGE

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THE ANCIENT MAYA AND THEIR CENTRAL AMERICAN NEIGHBORS

Geoffrey E. Braswell

Central America is often left out of books on the Maya. Focusing on the Maya in isolation, without including their neighbors, is a mistake. Indeed, our knowledge is enormously enriched when we see the Maya – along with their allies, enemies, and trading partners – as embedded in a world that includes their neighbors to the south. These neighbors include Nahua peoples of Chiapas, southern Guatemala, and El Salvador, Lenkan speakers of Honduras and El Salvador, Xinka of southern Guatemala, and pockets of Oto-Manguean speakers in most of these places.

The ancient Maya are famous for their large stone pyramids, hieroglyphic writing system, complicated calendar, and beautiful stone sculpture. Yet none of these accomplishments were unique to their civilization. Instead, these cultural achievements were shared across southern Mexico and northwestern Central America, an area that scholars call Mesoamerica. Nonetheless, Maya civilization is often studied either within a vacuum, by subregion, or according to modern political borders. As a result, many textbooks and edited volumes consider the southern lowlands of Guatemala and Belize but omit the Maya highlands and northern lowlands of Yucatan. When archaeologists do seek a broader context for the ancient Maya, they usually look to the northwest and consider only the most powerful urban civilizations of central Mexico – the Olmecs, Teotihuacanos, Toltecs, and Aztecs. Seldom are the Maya and their southeastern Central American neighbors of El Salvador and Honduras considered together, despite the fact that they engaged in mutually beneficial trade, intermarried, and occasionally made war and conquered each other. Central America is often left out of books on the Maya. Focusing on the Maya in isolation, without including their neighbors, is a mistake. Indeed, our knowledge is enormously enriched when we see the Maya – along with their allies, enemies, and trading partners – embedded in a world that includes their neighbors to the south.

One purpose of *The Maya and Their Central American Neighbors* is to begin to rectify this by presenting original research spanning the whole of the Maya area, including the

too often overlooked northern lowlands of Mexico (Bey 2006: 16). We also consider the linguistically mixed regions of southern Guatemala and western Honduras – where the Maya lived alongside people who spoke other languages – and non-Maya eastern El Salvador. In order to achieve more balance, each of the major regions considered in our book is given two or three chapters. Because of the enormous expansion of research in recent decades, it is no longer possible to treat within a single volume all the advances in our understanding of the ancient Maya, let alone those of the many complex and more simply organized peoples who lived to their south and southeast. Our treatment here must be limited and is admittedly biased towards our own research interests. We credit these to one man and the intellectual legacy he has given us.

This volume is the second resulting from sessions held in honor of E. Wyllys Andrews V at the seventy-fifth annual meeting of the Society for American Archaeology (SAA) in Saint Louis in 2010. The first volume (Braswell 2012a) and session focused on important recent developments in our understanding of the prehistory of the northern lowlands, that corner of the Maya world where the Andrews family has made a singularly strong mark. The second session, organized by Winifred Creamer, considered Will Andrews's important and continuing contributions to our understanding of the prehistory of Central America, especially through projects he directed in El Salvador and Honduras. Andrews's impact as a scholar and mentor has also influenced research in Guatemala and Belize, particularly in regards to our understanding of ancient pottery. This volume includes some chapters derived from our Central American session and several others that round out our coverage of Mesoamerica, from Yucatan to El Salvador.

The current work considers a wide variety of topics, methodologies, and cultures of Mesoamerica. For this reason, I have not endeavored to write a synthetic introduction of the sort that began *The Ancient Maya of Mexico: Reinterpreting the Past of the Northern Maya Lowlands* (Braswell 2012b). Nonetheless, several themes run throughout this book, ones that parallel Andrews's own interests and – in some cases – that are derived directly from his work. First, the volume is organized according to different regions of southeastern Mesoamerica. If we include early work, Andrews has conducted archaeological field research in most of these regions (Figure 1.1): Quelepa (El Salvador), Copan (Honduras), Seibal (Guatemala), and Komchen (Yucatan, Mexico). Second, many of the individual chapters focus on the origins of complex society in southeastern Mesoamerica or on its disintegration. By this, I refer to the earliest Preclassic (Formative) pottery and permanent settlement, and also to the famous "Maya Collapse" of the Terminal Classic period. Third, Andrews's and our own studies of ceramics and architecture have concentrated on interregional cultural interaction, the spread of ideas and symbolic systems, and identity. A fourth thread in both this volume and Andrews's research is the royal court, specifically the excavation of palaces in order to understand chronology, collapse, and broader issues related to political structure, economic organization, and power. Associated with this is the perception of how royal courts are understood through dynastic history. A fifth theme that runs through this work is the patterning of ancient settlement. Andrews's own impact on settlement studies was most strongly seen in his mapping and demographic research with William Ringle in northwest Yucatan (Ringle and Andrews

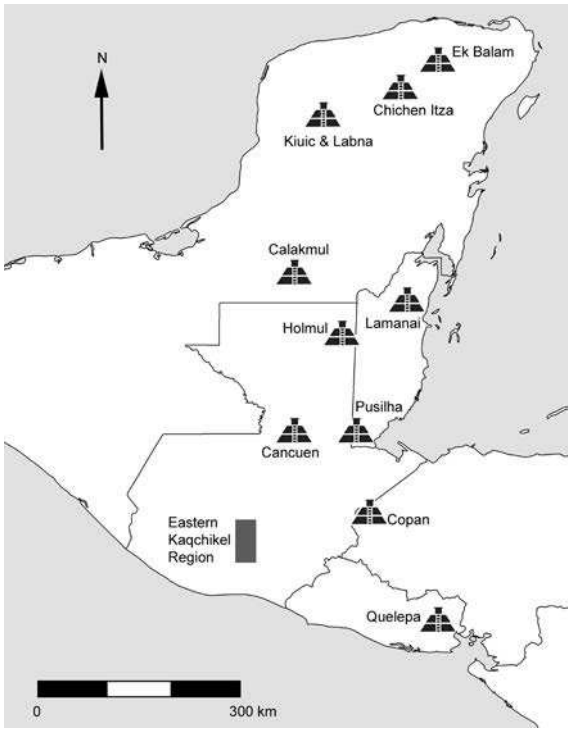

FIGURE 1.1 The Maya and their Central American neighbors: sites marked with pyramid symbols are the subjects of chapters in this volume; the mapped portion of the Eastern Kaqchikel highlands is shown in dark gray. Additional relevant sites are shown in Figures 8.3, 10.1, 12.2, 13.1, and 14.1.

1990). Two contributions to our volume build directly on Andrews's dissertation research at Quelepa, El Salvador, by analyzing architecture and settlement patterns at that site. The final and clearest strand running through and unifying our work is Will Andrews himself. Most of the contributors to this volume are his students, and all of us have benefited greatly from his thoughts, research, and guidance.

The book is structured by area, beginning with non-Maya El Salvador and multiethnic Honduras. These are discussed in three chapters. The second section is dedicated to highland Guatemala and its relations to non-Maya peoples living in the Pacific piedmont and on the south coast. The Maya highlands form an area that too often is ignored outside of the world of Guatemalan archaeology. The third section comprises three chapters that focus on the southern and central lowlands of Guatemala and Mexico, while the two chapters of Part IV consider the eastern periphery of Belize. The next two chapters discuss the northern lowlands, an area that, despite its importance, is not often given equal weight in discussions of the Maya outside of Mexico. The final contribution examines the Norte Chico of Peru, an area far removed from Mesoamerica, but presents an important theoretical analogy that has been used to understand Maya state formation.

Rather than follow the areal order of the sections of this book, in this introduction I emphasize the theoretical and substantive aspects of our work that tie it together into a single volume.

Preclassic origins

The origins of Preclassic village life, the adoption of agricultural economies, and the first use of pottery in southeastern Mesoamerica are pivotal topics of Maya archaeology. But it is fair to say that they have not been subject to sustained research at the level they deserve. Andrews has made particularly important contributions to these subjects through his definition of the Uapala sphere in the southeastern periphery of Mesoamerica (Chapter 2; Andrews 1976), his description of Middle Preclassic architecture and ceramics in northwest Yucatan (Andrews 1988, 1990), his reappraisal of the Swasey complex (Andrews and Hammond 1990), his general discussion of early ceramic spheres in the Maya lowlands (Chapter 7; Andrews 1990), and, most recently, his identification of very early pottery in the northern Maya lowlands (Andrews and Bey 2011; Andrews *et al.* 2008).

Experiments with horticultural life ways began in many regions of southeastern Mesoamerica during the late Archaic (or Preceramic) period (Chapter 5; Neff *et al.* 2006; Pohl *et al.* 1996). Nonetheless, evidence for permanent villages dating to before about 1100 BC (calibrated) is limited largely to the Pacific Coast and piedmont region of southern Chiapas and Guatemala, highland Honduras, the Salama Valley of Alta Verapaz (Sharer and Sedat 1987: 428), and perhaps Kaminaljuyu (Popenoe de Hatch 1997, 2002). Moreover, most sites where there is strong evidence for pottery dating to this early time are in regions where a close linguistic affiliation with Mayan languages seems unlikely. Put another way, we still lack unambiguous evidence that the lowland Maya lived in Early Preclassic villages and made pottery much before about 1100 BC (Lohse 2010: 343). Despite this, research at sites including Cahal Pech, Blackman Eddy, Cuello, Colha, Seibal, Altar de Sacrificios, Tikal, Komchen, and Kiuic demonstrate that settled villages where pottery was produced certainly existed during the period 1000 to 800 BC and perhaps a century earlier. There is still debate as to whether all of these early sites were inhabited by "Maya" (e.g., Ball and Taschek 2003) and whether or not the phrase "Early Preclassic" should be used to describe the time period when such pottery was first produced (see Chapter 7, note 1). Incised symbols on the earliest known pottery of the Maya lowlands are related to a complex that first appeared several centuries earlier and farther west during the Early Preclassic period. Nevertheless, their first manifestation in the Maya lowlands occurred at a time very close to the arbitrary beginning of the Middle Preclassic, at 900 bc (uncalibrated). If the Terminal Archaic and Middle Preclassic of the Maya lowlands were separated by an Early Preclassic period, current evidence suggests it did not last much more than a hundred years (Cheetham 2005: fig. 3.2; Garber and Awe 2009; cf. Lohse 2010). Thus, after nearly 2,000 years of experimentation with horticulture, the first permanent villages with pottery-using occupants developed quite rapidly in the Maya lowlands. There is no long Early Formative sequence for the Maya lowlands

comparable to those of the Valley of Oaxaca, southern Veracruz, the Basin of Mexico, or the Pacific coast of Guatemala and Chiapas.

In Chapter 7, Niña Neivens de Estrada discusses an early ceramic complex from the site of Holmul, Guatemala. In a very real sense, Holmul is where archaeological studies of Maya pottery began (Merwin and Vaillant 1932), so it is fitting that some of the earliest pottery in the Maya lowlands should be found there. Pottery belonging to the K'awil complex (1000–850 BC) was recovered from architectural fill contexts at Holmul and cross-dated by comparison with similar "Pre-Mamom" pottery (i.e., lowland ceramics dating to a time before the second half of the Middle Preclassic) from sites in Belize and Guatemala. An important aspect of Neivens de Estrada's study is that, following Andrews's (1990) example, she viewed collections of early pottery from all the important southern lowland sites with Pre-Mamom ceramics. The K'awil complex shows close ties with the Cunil/Kanocha (defined first at Cahal Pech and Blackman Eddy), Eb (Tikal), and Xe/Real Xe (Altar de Sacrificios and Seibal) complexes from Peten and western Belize. In fact, it contains the full range of forms, slip colors, and incised designs represented at these early sites as well as types that were previously unreported. Among these is Jobal Red, with a distinctive red micaceous slip that sometimes contains specular hematite. The closest similarities to Jobal Red are found not in the Maya lowlands but in the Pacific coast and highlands of Guatemala, in accord with some speculations about the origins of Mayan languages. Incised white wares at Holmul also point to contacts with these areas.

Neivens de Estrada clearly disagrees with scholars who argue that the presence of pan-Mesoamerican (or "Olmec," if one is so inclined) incised motifs implies an influx of non-Maya people at the time that settled village life appeared in the Maya lowlands. In fact, she points to a growing body of evidence from Holmul and elsewhere that continuous occupation began in the eastern lowlands at least 300 years earlier, during the Terminal Archaic period. Instead of positing migration, she suggests that the earliest potters and pottery consumers at Holmul participated in a very large network over which ideas about ceramics and symbols were shared. Interaction was closest and most frequent among Holmul and its near neighbors in the central Peten and western Belize, but inter-community ties also indirectly linked Holmul to more distant sites in northern Belize, southwestern Peten, the southern Maya region, and even highland Mexico.

Chapter 5, by Eugenia Robinson and me, considers the origins of complexity in the Maya highlands of Guatemala, specifically within the departments of Sacatepequez and Chimaltenango. In the eastern half of the Kaqchikel region, we surveyed some 350 square kilometers of terrain, stretching from the southwestern slopes of Alotenango Volcano almost to the Motagua River (see Figures 1.1 and 5.1). Moreover, we conducted excavations at several sites. Tantalizing evidence of landscape modification and the introduction of cultigens can be found dating back well into the Archaic period, but – as elsewhere in Guatemala (Neff *et al.* 2006) – we still lack clear evidence of living floors, hearths, and other features dating to this early occupation. Although a gradual *in situ* development from Terminal Archaic seasonal foraging and horticulture to settled village life seems likely, sites with unambiguous evidence of this pattern are still lacking. In part, this is because of the

extremely dynamic and ever changing landscape of the southern Maya highlands, where volcanic eruptions, earthquakes, and all too frequent landslides bury, disturb, or obliterate many sites. But this is also a reflection of how little archaeological research has been targeted at searching for pre-ceramic occupations.

As in the Maya lowlands, there is little evidence of a long Early Preclassic tradition. In the Kaqchikel highlands, a few sherds with Pacific and piedmont affinities suggest ties to that region. The Arevalo complex at Kaminaljuyu (Popenoe de Hatch 1997, 2002) might date to the very end of the Early Preclassic, but this is still uncertain and seeming less and less likely. Recent work at nearby Naranjo does not resolve the status of Arevalo but does demonstrate occupation as early as 900 BC (Arroyo 2010). As in the lowlands, there is abundant evidence for permanent occupation in the Middle Preclassic. The earliest Middle Preclassic sites of the eastern Kaqchikel region are quite small and lack visible mounds or monumental architecture. In contrast, evidence for incipient complexity dating to the early first millennium BC can be found at Las Charcas-phase Naranjo at roughly the same time as similar developments occurred at "pre-Mamom" sites in the southern Maya lowlands.

In great contrast to Kaminaljuyu, however, social and political complexity was slow to arrive in the eastern Kaqchikel highlands. There are many sites in this region that date to the late Middle Preclassic and early Late Preclassic, but they too seem to lack artifical platforms visible on the current ground surface. Burials do not clearly demonstrate inherited, rather than achieved, status. Over time – and especially by the Late Preclassic period – connections between the Kaqchikel region and the Valley of Guatemala seem to have dwindled. Thus, as the great chiefdom of Kaminaljuyu developed in the Valley of Guatemala, the highlands to the east appear to have maintained simpler principles of political organization and were not absorbed into that polity. During the second half of the Late Preclassic, much of the eastern Kaqchikel highlands were abandoned. This happened earlier and more completely in the north and to a lesser degree in the south. Abandonment might have been stimulated by climate change and "pull" factors attracting settlers to Kaminaljuyu. Like Teotihuacan and Monte Alban, Kaminaljuyu exerted a centripetal force attracting a larger and larger population focused on the site and its immediate environs. Nonetheless, we stress that we can find no evidence of political domination of the eastern Kaqchikel highlands during the Late Preclassic. Remaining populations seem to have had very little interaction with their neighbors to the east.

Settlement patterns and site planning

Chapter 5 also considers settlement patterns in the eastern Kaqchikel highlands and notes that there is a single level of settlement in both the Middle and Late Preclassic. Several other chapters look explicitly at settlement patterns and site planning. In Chapter 6, Robinson focuses on the Antigua Valley during the Late Classic period – a time of much greater political complexity than the Preclassic. She makes several intriguing observations. First, important sites in the settlement hierarchy often were located in defensible hills. Borhegyi (1965) noted this pattern for the Postclassic period, but

Robinson extends his observation back in time. Nonetheless, compared with areas farther west in the highlands, there is limited evidence for man-made defensive features. Instead, site location seems to have been chosen in order to take advantage of lines of site and view sheds, perhaps for communication and organizing defense of the sites in the valley below. Second, the importance of defensible locations seems to have varied within the valley. At its northern end, such locations were paramount. But in the southern and central valley, settlements were more open. Third, the Antigua Valley marks the northernmost extension of Cotzumalguapan-style sculpture containing hieroglyphs (other related but illiterate, cruder, and simpler monuments are found throughout the Late Classic Kaqchikel highlands) and participated in the same general ceramic sphere. Combining settlement, artistic, and ceramic data, Robinson proposes that the Antigua Valley was an acculturative frontier zone, where K'iche'an peoples of the Kaqchikel highlands interacted with foreign Cotzumalguapan elites from the Pacific coast and piedmont. Finally, citing paleoecological data, Robinson argues that the Late Classic collapse of the Valley of Antigua corresponded in time to the lowland Maya Collapse and might have been triggered by a drought beginning in the late eighth century.

Two chapters consider settlement and site planning at Quelepa, located far outside the Maya region in eastern El Salvador (see Figure 1.1). Will Andrews conducted his dissertation fieldwork at the site, later published as an important monograph (Andrews 1976). In the more than 40 years that have passed since this research, no similarly extensive work has been conducted at an archaeological site in eastern El Salvador. In Chapter 2, Wendy Ashmore considers the impact of human and natural landscape on site planning at Quelepa. Following Andrews, she notes clear and distinct breaks in the location of structures at the site during different periods. Like the Valley of Antigua during the Late Classic period, Quelepa can be considered as occupying an acculturative frontier zone throughout its long history. Ashmore stresses alternating westward (i.e., towards Mesoamerica) and eastward (beyond Mesoamerica) orientations in material culture. In terms of settlement, it is most striking that Late Classic Lepa construction did not seek to cover or obliterate earlier platforms dating to the Preclassic and Early Classic periods. Instead, the Lepa-phase center of the site was shifted *laterally* to the west. This had the effect of preserving the ruins, tying them to the surrounding natural landscape, and linking the newly arrived inhabitants of Quelepa (people with ties to Veracruz) to the distant but local past. Ashmore discusses the importance of this in terms of inhabitation, materiality, and social memory.

In Chapter 3, Sampeck returns to Quelepa and considers its position more broadly within Mesoamerican and Central American worlds. She sees it not as occupying a fixed boundary but instead as being within a loosely allied frontier that fostered greater agency. At times – as Ashmore also sees in site planning – Quelepa seemed to be "inward looking" towards Mesoamerica (during the early Uapala and late Lepa phases), but at other times it looked outwards towards Central America (especially during the Shila phase, when architecture and site planning were distinctly non-Maya in character). Sampeck cautions that we should not interpret the cultural affiliations of the site in these terms alone. During all periods, obsidian procurement patterns and technology indicate closer connections with southeastern Mesoamerica than with

lower Central America. During the Shila phase, Quelepa pottery reflects clear continuities with earlier local materials and even ties with the Maya region and western Honduras, despite the fact that the site employed a new architectural style and site-planning norms that were distinctly non-Mesoamerican in character. Quelepa, then, exhibits its own particular and inimitable position, engaging in the kind of independent and "roguish" behavior possible only in an acculturative frontier. Its leaders picked and chose from a wide variety of traditions at will, in a way that Sampeck construes as "thumbing [their] nose[s]" at the Mesoamerican heartland. What seems to have been particularly important to Central America southeast of the Maya region was preserving political forms that were less centralized than the states that emerged in the Early Classic period. Such resistance to – or resilience in the face of – political change maintained independence and allowed for greater local expressions of agency.

Turning to later documents of the colonial period, especially the Hack Atlas, Sampeck notes that San Miguel (a colonial town not far from Quelepa) was depicted as *the* important place in El Salvador, of even greater consequence than the capital, San Salvador. During much of the early colonial period, in fact, San Miguel and eastern El Salvador had stronger ties with Honduras and pivotal events there than with the capital. The people of historical eastern El Salvador therefore continued a long-standing tradition of rogue colonialism first exhibited at Quelepa in a region far from centralized control. As a result, for millennia the inhabitants of eastern El Salvador enjoyed more freedom of action.

Winfred Creamer, Jonathan Haas, and Allen Rutherford return to settlement studies in the final chapter of the volume. This contribution, whose lead author was Will Andrews's first doctoral student at Tulane and organized our SAA session, is a wonderful example of *lagniappe*, a French Creole word meaning "a little something for nothing" and which has roots that fittingly traverse both Spanish and Quechua. The chapter examines late Archaic settlement in the Norte Chico zone of Peru, a region sometimes said to be the home of the first civilization in the world. Although the culture discussed is far from Mesoamerica, the theoretical question and methodology employed by the authors – the origins of complexity as revealed through settlement pattern studies – have clear parallels with the Maya region. Creamer and her colleagues use Colin Renfrew's (1986) model of peer-polity interaction to examine the emergence of large, multiple mound sites. It is important to remember that Renfrew, too, included the Maya (illustrated by Copan, Honduras) as an important example of his model. During the period from about 3000 to 1800 BC, at least 30 sites characterized by huge mounds and sunken circular plazas flanked by upright monoliths were occupied. Not all were contemporary, but 12 such sites flourished around 2200 BC in a relatively small and constricted region. The repetition of architectural features, the even spacing of sites on the landscape, and the placement of smaller sites midway between the largest sites all suggest competition, the maintenance of boundaries, and the existence of communication routes linking the major sites. Moreover, the remarkable similarities seen among all sites imply a shared culture. All of these are consistent with Renfrew's notion of peer polities and, although the word "state" is not at all appropriate in this case, with what he calls Early State Modules.

Creamer and her colleagues look in detail at data documenting competition for resources, competitive emulation, and symbolic entrainment – aspects of Renfrew's model that are critical in identifying peer-polity interaction. Curiously, they find that site location and form are open, and that there is no other indication of conflict. They therefore suggest that, during this early pre-state stage in Andean history, Carneiro's (1970) model for the origin of the state does not apply. It could be that many of the attributes of peer polities, such as competitive emulation, high levels of exchange, and competition for resources might also be characteristic of some social, territorial, and economic groups that existed before the emergence of chiefdoms and expansive warfare. Moreover, cooperation among intermarried and economically interacting groups might also have fostered the emergence of peer-polity structure at a simpler political level. Thus, I suggest that the phenomenon described by Creamer and her colleagues also is consistent with the tribal network model proposed by Braun and Plog (1982).

There is no comparable example for the Late Archaic or Early Preclassic Maya. Nonetheless, a network of highly interactive polities sprang up across the Pacific piedmont and the southern Maya lowlands by the early Middle Preclassic, and slightly later in the Maya highlands and northern lowlands. For many reasons, survey in such regions is much more difficult than in arid coastal Peru, but it seems that the early Maya were quite different from the people of the Norte Chico in several respects. First, the density of large, impressive sites with public architecture was much lower. Although we now have evidence of public architecture at Seibal around 1000 BC (Inomata *et al.* 2013), nothing comparable is yet known in the Maya region before about 600 BC. Second, early Maya social and political systems were not as stable as those of the Norte Chico. In Peru, this early "civilization" grew slowly over about 800 years and, after a period of stability, contracted slowly over another 700 years – both apparently with relatively little change in basic political structure. This gradual arc contrasts with the rapid appearance of the first agricultural villages (the stage most analogous to the Norte Chico, although in the Maya area the first villagers made pottery), followed quickly by individually aggrandizing chiefdoms and the emergence of states in the Maya lowlands. There, the entire process took something like 600 to 1,000 years. Thus, while both regions shared an arrangement of similar looking sites linked by culture, exchange, emulation, and competition, the results of peer-polity interaction in the Maya region were remarkably different than those in the Norte Chico.

Kingship, royal courts, and architecture during the Classic period

Four chapters in our volume examine specific aspects of rulership, palace architecture, and the royal courts of the ancient Maya in Guatemala, Mexico, and Belize. The authors of these contributions approach their topic from different scales, ranging from texts painted on ceramic vessels, to public propagandistic statements of legitimacy carved on larger monuments, to the architecture associated with rulership, to the function of cities as both dynastic seats and places of commerce.

At the smallest scale, Chapter 9, by Markus Eberl, considers Late Classic Dynastic Vases (Martin 1997), a well-known class of Codex-style painted vessels. These were produced during the eighth century AD near the modern border between Guatemala and Mexico. The Dynastic Vases contain hieroglyphic texts painted in black and red on a cream background. The texts on the vessels all share a particular form and content; they are king lists that contain accession dates in Calendar Round form. The subjects of these texts are the rulers of the Snake Head kingdom, which by AD 636 was centered at Calakmul, one of the largest and most powerful Maya cities (Grube 2004; Marcus 2012). The vessels themselves, however, date to a time when the power of the Snake Head kings was in serious decline (Braswell *et al.* 2004; Martin and Grube 2008). Such simple texts seem at first glance to be factual documents. Nonetheless, many of the rulers they describe are unknown from other sources, some kings are presented in a chronological order contradicted by the texts on carved monuments, a few important kings are omitted, and the vase texts consistently mix historical individuals with the subjects of legend or myth. Eberl argues that, rather than interpret the Dynastic Vases as factual documents, pure propaganda, or myth, we should consider them as emic statements reflecting how the Maya viewed the past. Their perspective appears to have blended all three categories for rhetorical purposes.

Using a rather delightful conceit – a coffee mug painted in honor of Will Andrews in the style of a Dynastic Vase – Eberl shows precisely how the ancient Maya texts functioned. The simple repetitive "staccato" structure of such texts provides the appearance of a chain of rulers that was unbroken from the distant past to the present, creating the impression of inevitability and order. This, rather than historical accuracy, was the intended message encoded on the pots.

In Chapter 10, Christian Prager, Beniamino Volta, and I consider ancient kingship at the Maya city of Pusilha, Belize. We first describe archaeological research conducted during the past decade and then consider the hieroglyphic texts that are known from the site. Like the Dynastic Vases discussed by Eberl, these texts date to the Late Classic period and contain information about the lives and actions of rulers. Unlike the painted texts of the Snake Head kings, these hieroglyphic inscriptions are carved on large monuments called stelae and, for the most part, describe historically current or relatively recent events. What we know about the lords of the Kingdom of the Avocado (the ancient name of Pusilha) is derived from public texts erected by rulers in order to celebrate their actions, ancestry, and legitimacy.

Six kings and one queen can be placed within a historical chronological framework. The reigns of two additional rulers cannot be precisely determined, a third can be placed in time but has a name that is thoroughly illegible, and a fourth did not employ the emblem glyph of Pusilha. Two of the kings of Pusilha used a paramount title seen only at the greatest of all Maya cities. Beyond the range of historical texts (AD 571–798), legendary individuals who lived in AD 81 and AD 159 are discussed. One of these early kings, nicknamed Decorated (or Foliated or Leaf) Ajaw, is also mentioned in the texts of several powerful Maya cities. Thus the rulers of Pusilha linked themselves to their counterparts at Tikal, Calakmul, Copan, and other polities by referring to the same legends.

Despite this allusion to a shared past, in one regard the lengthy texts of Pusilha are exceptional: they contain no clear, direct, and unambiguous reference to a powerful and archaeologically known Maya kingdom. Moreover, no such allusion to Pusilha is found in the texts of any other site, including those just a few kilometers away in southern Belize. It seems that the royalty of Pusilha tried hard to remain independent of the political and military conflicts characteristic of the southwestern Peten (Chapter 8), a region from which the settlers of the site might have come. At the same time, powerful neighbors to the south, west, and north of Pusilha seem to have cared little for an independent polity located in the underpopulated eastern frontier of the Maya world. Pusilha, then, might represent another example of the success of roguish colonialism.

Chapter 12, by George Bey and Rossana May Ciau, discusses a particular architectural form that is common in the northern lowlands and is known as the *popol nah* or "mat house." Such structures served as council houses where groups met to discuss and make decisions regarding their lineage, community, and polity. Such structures, called *nim ja* (great houses) in Kaqchikel Mayan, were identified long ago at major Postclassic sites of the Maya highlands. They also were known in a somewhat different form at Postclassic Mayapan. It was not until the late 1980s that such structures began to be identified at Classic Maya cities.

According to Bey and May Ciau, the earliest *popol nahs* were built in Yucatan – especially the Puuc region – at the dawn of the Late Classic period. They argue that the first appearance of this type of open and public platform represents a change in political structure. By about AD 550, the northern lowlands underwent a transition from simply organized communities to polities ruled by powerful lineage councils. Within the span of just two centuries, such councils were superseded by the centralized rulership of the Late Classic *ajaw* system. Thus, after AD 750, *popol nahs* became less important in the northern lowlands and were incorporated into palace compounds. In the aftermath of the collapse of the northern Maya lowlands, a new kind of structure appeared in many locales: the C-shaped building. Bey and May Ciau suggest that this represents the rebirth of open, public architecture and council-based decision-making. The *popol nah*, therefore, signifies the emergence of segmentary rule, its replacement by centralized kingship, and the reappearance of segmentary political systems after about AD 950.

Rather than consider texts or a particular type of structure, Arthur Demarest examines an entire city. In Chapter 8, he discusses the history and function of the Late Classic port of Cancuen. A relatively small Maya site built in an oxbow in the Rio Pasion, Cancuen consists of little more than a series of palaces and port complexes. It became an important place because it occupied a strategic position at the crossroads of critical transportation routes. Positioned at the head of navigation of the Pasion, Cancuen was the lowland site farthest upstream on the river, located at a point that linked the Maya highlands with a vast river system flowing northwards and opening into the Gulf of Mexico. Goods critical to the maintenance of elite power that flowed out of the highlands through Cancuen included quetzal feathers,

jade, obsidian, and cloth. At the northern foot of the karstic mountains, Cancuen also could access an important east–west trade route from Chiapas to southern Belize, linking sites as distant as Palenque and Pusilha.

Demarest describes the various port facilities, palaces, lithic production sites, and ballcourts that constitute Cancuen. He notes that the site flourished as a distant ally of Calakmul but reached its apogee as an independent power in the aftermath of the collapse of the predatory Dos Pilas kingdom, located downriver. For a period of roughly 40 years at the end of the eighth century, the roguish merchant kings of Cancuen thrived and prospered at the crossroads of the lowland and highland Maya worlds. They did so by jockeying for power with their neighbors, and by employing symbolic and ritual language that could be understood by both highlanders and lowlanders alike.

Terminal Classic collapse and reorganization in the early Postclassic period

Three chapters tackle the subject of the "Classic Maya Collapse," perhaps the most enduring topic in Maya archaeology and one that unites scholars working from Chiapas to Yucatan to Honduras (e.g., Culbert 1973; Demarest *et al.* 2004). The contributions in our volume approach this subject from perspectives that are heavily influenced by Andrews's work. All three consider ceramics, and two focus on sites that have been at the center of his research and writing: Copan and Chichen Itza.

In Chapter 4, Cassandra Bill describes the Late Classic, Terminal Classic, and Early Postclassic pottery of Copan, Honduras, and demonstrates the power of detailed modal analysis as a way of creating fine-grain ceramic chronologies; at least two subphases of the four temporal blocks she describes are less than a century long.

Bill emphasizes changes in the ceramic inventory of Copan during the Classic to Postclassic transition and presents them as an example of similar processes that occurred across much of the southern Maya lowlands. Although the details of these changes are unique to Copan, Bill stresses that the basic pattern was the same at other sites where dynastic rule and populations collapsed. As the Late Classic drew to a close, there was a sharp decline in the production of elite wares, a constriction of the size of interaction spheres, and a concomitant rise in regionalization. At Copan, this process began during the lifetime of the last king (AD 750–*ca.* 820) and was particularly acute during the post-dynastic occupation of the final royal palace compound (AD 820–850/900). Those last few years were marked by a dramatic decline in local production industries linked to a loss of potters and the consumers of their wares.

The post-dynastic pottery of Copan during the ninth century is Terminal Classic in nature because it represents a continuation – albeit in a greatly attenuated form – of Late Classic traditions established during the reigns of the last five Copan rulers. But the pattern of decline described by Bill began during the Late Coner subphase (AD 750–820); thus much of that complex also can be considered Terminal Classic in character. In great contrast to the Late and Terminal Coner subphases,

pottery of the Early Postclassic Ejar complex consists of "a radically different domestic inventory." The best explanation for this is that the royal center of Copan was abandoned at the end of the Classic period and was later reoccupied by a "new group with distinct pottery-making practices and different wide-reaching connections with external regions." Had Copan not been abandoned and resettled by new people, its Early Postclassic ceramic complex would have witnessed continuity in local pottery-making practices, as was the case at tenth-century Lamanai (Chapter 11) and Chichen Itza (Chapter 13). Most of us who work at Copan consider it likely that the settlers of the Postclassic Ejar phase were speakers of Lenkan, not Mayan.

In sum, the thrust of Bill's argument is that Copan is similar in many ways to lowland Maya sites that saw a rapid decline at the end of the eighth century. That decline was not just political but also demographic. The end of monument erection at about AD 790, the cessation of all known construction by about AD 810, and the decline of ceramic richness and variety during the late eighth century are consistent with population loss and a weakening of the power of the last *ajaw* of Copan. Divine kingship ended at Copan with his death during the period 810–822. Bill makes clear that ceramic evidence implies that the remaining population abandoned the city within decades of this event. These conclusions should not sound new to archaeologists who work in Guatemala or Belize, or even to those whose knowledge of Copan is limited to literature published more than 20 years ago. But they do represent a return to a traditional perspective through Bill's careful, detailed, and thorough refutation of a revisionist collapse narrative proposed in the early 1990s.

Proponents of the revisionist account argued that most of the Early Classic Copan kings were legendary rather than real, that the site was built primarily during the Late Classic period, that population levels remained close to their peak until after AD 900, that population loss was triggered by anthropogenic environmental destruction, that the local forest did not begin to recover from human degradation until after 1200, that the demographic decline was gradual, that Copan was not abandoned until 1250 or even later, and that the pottery inventory of the period 900–1250 represented an extension – with the addition of some new types and the loss of others – of the Late Classic ceramic complex (Freter 1988, 1992, 1994, 1996, 1997; Paine and Freter 1996; Paine *et al.* 1996; Webster and Freter 1990a, 1990b; Webster *et al.* 1992, 1993, 2000, 2004). This hypothetical extension was called the "late Coner" subphase and was described as a continuation of local utilitarian Late Classic ceramic traditions. This is precisely the opposite of the pattern carefully documented by Bill in Chapter 4. That a Classic Maya ceramic phase – even with two subphases – could last a full 700 years is indeed a remarkable proposal. Bill's research proves it is false.

The revisionist narrative was not based on empirical ceramic analysis. This is because its proponents worked outside of the site center in groups where pottery sherds are especially eroded. Instead, they relied on a series of more than 2,200 obsidian hydration dates determined through measurements made using an optical microscope. Such a technique is qualitative and indirect because it does not actually

measure the amount of water adsorbed by an obsidian artifact. Virtually all aspects of these dates have been questioned. First – and fundamentally important – obsidian, just like ceramics, is highly subject to erosion. The technique should not be employed where there is a strong likelihood that obsidian hydration rinds are subject to significant weathering, as suggested by ceramic erosion at Copan (Braswell 2003). This is because eroded rinds yield late hydration dates. Second, the interpretation of the phenomenon observed by the qualitative optical approach has been challenged (Anovitz *et al.* 1999); it is almost certainly a Schlieren line representing not a hydration boundary but an inflection point where water concentration declines at a maximum rate. Third, the mathematical model of simple hydration – rather than concentration-dependent hydration – was incorrect (Braswell 1992: 132; 2003). Fourth, claims made for the precision of the method surpass those determined by the Rayleigh criterion; it is impossible to make such fine measurements with an optical microscope. Fifth, no attempts were made by the original researchers to measure at Copan itself the environmental variables that directly affect hydration (Braswell 1992; 1997: 265). Sixth, scholars ignored the central tendency in the distribution of dates and focused instead on the late tail end. This is an incorrect approach to statistical data (Cowgill and Kintigh 1997). Data sets all have outliers, and very large sets tend to have large numbers of outliers; a single date of AD 1250 out of 2,200 certainly cannot be interpreted as indicating that population continued until that time. Seventh, there was little attempt to understand error margins; even small differences in temperature can dramatically impact hydration dates (Braswell 1992: 135–9). Eighth – and most critical of all – two independent laboratories (MURR and the Diffusion Laboratory) tried to reproduce the results of obsidian hydration dating at Copan and failed (Braswell 1997: 266; 2003). They found that virtually all obsidian artifacts exhibit significant weathering, that many actually have no hydration rind at all (and hence "date" to the present), that hydration measurements do not even form a consistent sequence (i.e., that the oldest artifacts recovered from sealed contexts sometimes yield the most recent dates), and that very different measurements can be made from different sides of the same artifact. In the late 1980s and 1990s, at least three laboratories employed the Copan technique at other sites in the Maya area. These include Tak'alik Ab'aj (Dillon *et al.* 1988; Neff *et al.* 1993), Xunantunich (LeCount *et al.* 2002), Dos Pilas (Stiver 1994), and Kaminaljuyu (Michael Gottesman, personal communication 1998). In all these cases, the optical qualitative technique yielded unsatisfactory dates. In sum, the results of obsidian hydration dating as employed at Copan in the late 1980s and early 1990s have been utterly irreproducible.

The question of the timing of the demographic collapse at Copan was not ultimately resolved by any chronometric means, although radiocarbon dating has played a role (Fash *et al.* 2004; Manahan 2004; Manahan and Canuto 2009). Instead, it was solved by careful excavations in Group 10L-2 by Will Andrews (Andrews and Bill 2005; Fash *et al.* 2004) and in El Bosque by Kam Manahan (2003), and by the subsequent meticulous and detailed ceramic analyses of Cassandra Bill (Bill 1997). Their work, and that of environmental specialists (McNeil *et al.* 2010), has

closed the debate concerning the collapse at Copan. The political and demographic collapse began during the eighth century and was completed in the ninth century.

Copan was abandoned early in the Terminal Classic period. Nonetheless, some ancient Maya cities did survive the Maya Collapse. One of these was Lamanai (Pendergast 1985, 1986), which served as an example for the revisionists at Copan. At Lamanai, the Terminal Classic period witnessed a contraction of settlement and population, but the site also saw a continuation through Early Postclassic times up to the present. The survival of Lamanai likely was related to its position on the New River lagoon, the largest body of freshwater in Belize. Although Lamanai is not located on the Caribbean shore, it had easy and rapid access to Postclassic coastal trade routes via the river. It therefore was connected to the Postclassic Mesoamerican World (*sensu* Smith and Berdan 2010).

Early Postclassic Buk pottery (AD 962–1200/1250) represents a continuation of long-established traditions of ceramic production and also manifests new ideas that circulated widely along the coastal trade route. Many of the motifs, forms, and surface treatments characteristic of this style may have originated in the Gulf Coast region of Veracruz and spread into the Maya lowlands on the heels of the Collapse. They became particularly important at Chichen Itza during the Sotuta phase, and some continued at Mayapan after the decline of the Itza. The first half of the Buk phase at Lamanai was contemporary with Early Postclassic Chichen Itza (Chapter 13), and the last 50 years or so overlapped with the rise of Mayapan.

In Chapter 11, James Aimers considers the Early Postclassic pottery of Lamanai, especially those vessels that he classifies as belonging to the Fine Orange supersystem. Fine Orange pottery – containing no temper – is a horizon marker for much of the Maya lowlands. It first appeared in the southern Maya lowlands at about AD 830 and ceased to be manufactured around AD 1050/1100. Although one complete Fine Orange vessel was found at Lamanai (see Figure 11.1), Aimers notes that true examples of the ware are quite uncommon at the site. Instead, the potters that supplied Buk-phase Lamanai produced a lot of vessels incorporating design motifs from Fine Orange Ware, especially from Silho Fine Orange consumed by the elites of Chichen Itza. These designs appear frequently on funerary vessels at Lamanai, so probably served a religious purpose or were used in statements of identity and affiliation.

Using Fine Orange-like pottery as a jumping-off point, Aimers asks us to re-examine two often ignored concepts in type-variety classification: ceramic systems and supersystems. Ceramic systems are based entirely on superficial aspects of pottery – what it looks like, not the characteristics of its paste. As Aimers stresses, it is the visible traits that often tell us what consumers desired in the pots they purchased. In contrast, ceramic taxa that include paste characteristics provide information on technology and place of origin. Ceramic supersystems are broader categories that incorporate multiple systems and show even more general and less specific commonalities of surface appearance.

By focusing on systems and supersystems rather than types, groups, and wares, Aimers is able to begin to answer a big question: How did Mesoamerican potters interact over vast areas? Fine Orange supersystem pottery manifests an

elite style, one that served as an integrative mechanism in the expanding world religion focused on the god Quetzalcoatl/Kukulkan (Ringle *et al.* 1998). This cult and the inauguration rites at its center created elite ties across Mesoamerica throughout the Postclassic period. Fine Orange supersystem pottery played an important role in the cult.

The great Terminal Classic to Early Postclassic city of Chichen Itza is the subject of Chapter 13. In our contribution, Ben Volta and I discuss the chronology of the site from many perspectives: indigenous documents, pottery, hieroglyphic texts, architectural styles, and radiocarbon dates. Excavations conducted in recent years (Braswell and Peniche May 2012; Schmidt 2011) have provided a wealth of new information concerning construction stages and ceramics (Chung 2009; Pérez de Heredia Puente 2010, 2012). Combining different lines of evidence, we conduct a Bayesian analysis of temporal data in order to create a more precise chronology for the city. Along the way, we correct some errors regarding the material culture and history of Chichen Itza.

Chichen Itza was founded in the Preclassic period, but the city as we know it began to form after AD 600. The earliest structures that have survived are deeply buried and date to the Late Classic period. During the late ninth century, older platforms were destroyed or buried and buildings in the Puuc or Maya style were constructed. These are associated with Yabnal pottery, especially what is called "Say" (Pérez de Heredia Puente 2010, 2012), "Tintin" (Chung 2009), or "Early" Slate Ware (Chapter 13). There is absolutely no Sotuta pottery associated with the construction of Maya-style structures – an important correction to earlier works, including our own (e.g., Braswell and Peniche May 2012: 230; Cobos 2004; Grube and Krochock 2011: 176). A very few sherds of what appear to be medium-fired Slate Wares also have been found in the fill of Maya-style structures. These can be called "Early Dzitas" (Chung 2009) or considered to be a local variant of Muna Slate (Johnson 2012; Pérez de Heredia Puente 2010). Nonetheless, we are not yet convinced that a full Cehpech ceramic complex ever existed at Chichen Itza (cf. Pérez de Heredia Puente 2010). The period AD 870–900 not only saw the construction of numerous Maya-style structures but also witnessed the carving of many hieroglyphic texts. Because this first great florescence of Chichen Itza is contemporary with the apogee of the Classic Puuc phenomenon, it is reasonable to refer to the years AD 870–900 there as the Terminal Classic.

In contrast, comparably little is known about the period AD 900–950/980. There are no hieroglyphic texts at Chichen Itza that date to this period, and only a few major buildings – such as the Castillo-sub – were built during this time. Volta and I argue that the early tenth century, the period that saw the collapse of the Puuc region and the near to complete abandonment of many inland sites, also was a time of significant reorganization at Chichen Itza. The hieroglyphic hiatus and dramatic slowdown in construction of the early tenth century might even be symptoms of a short-term population loss.

Like Lamanai, Chichen Itza emerged from the Terminal Classic and experienced a renaissance during the period AD 950/980–1050/1100. All of the major visible

structures of the Great Terrace, built in the new International style, date to this period. A few Maya hieroglyphic texts are known, as are many more examples of foreign-looking name phrases. The pottery of this second golden age belongs to the Sotuta complex, which – like the Buk complex at Lamanai – contains foreign stylistic ideas and elite imports, but otherwise is fundamentally derived from local Late and Terminal Classic antecedents. Recognizing the great continuity in utilitarian ceramics, we nonetheless see differences in material culture sufficient to warrant assigning the Sotuta phase and final period of glory at Chichen Itza to the Early Postclassic period. Thus, although the contemporary Postclassic Ejar complex of Copan represents a complete break from the past, the Early Postclassic complexes of Lamanai and Chichen Itza display continuation. All three sites participated in new, broad, and international connections with greater Mesoamerica. That greater Mesoamerica also included Quelepa (Chapter 2).

The legacy of E. Wyllys Andrews V

Will Andrews has made important contributions to our understanding of the origins of settled village life in the Maya region and lower Central America, studied ceramics from a broad comparative perspective, conducted the first extensive archaeological project in eastern El Salvador, directed settlement studies in Mexico, excavated and interpreted a royal palace occupied during and after the reign of the last Copan king, and provided important insights into the processes and events of the Maya Collapse – especially at Copan and Chichen Itza. As authors in our volume show, his research questions and methods have stimulated a wide range of scholars to conduct work in his footsteps.

Seven of the contributors to this volume were PhD advisees of Will Andrews, and he served on the committees of two more. Two authors are current Tulane graduate students, and another contributor was an undergraduate student of that institution. As of spring 2013, Andrews's direct academic legacy comprises 36 PhDs and five MAs, and there are still four more graduate students in the pipeline. We are all thankful for his inspiration and also for the vision of clear reasoning that he champions and urges us to pursue. Wendy Ashmore quips that Will has always encouraged his friends, collaborators, and students to stick "just [to] the facts, ma'am." We dedicate this book to Will with the hope that we have not strayed too far from them.

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